SPS Technologies
1700 W. 132nd St.
Gardena, CA 90249
ID: 169990

EQUIPMENT DESCRIPTION

A/N 556006 – Title V permit revision, de minimis significant

A/N 556007 (Administrative change, current A/N 530899, P/O G17075): - P/O
WASTEWATER TREATMENT SYSTEM CONSISTING OF:

1. WASTEWATER HANDLING SUBSYSTEM CONSISTING:

   A. WASTEWATER FEED TANK, 500 GALLONS.

   B. CARTRIDGE-TYPE FILTER HOUSING.

   C. ACTIVATED CARBON COLUMN, WITH 7 CU. FT. OF ACTIVATED CARBON.

   D. ION EXCHANGE SYSTEM WITH TWO CATION COLUMNS AND TWO ANION COLUMNS.

   E. STORAGE TANK, 1,500 GALLONS.

   F. UV TREATING UNIT.

2. SLUDGE HANDLING SUBSYSTEM CONSISTING OF:

   A. ACID WASTE TANK, **500** ~~**300**~~ GALLONS.

   B. CAUSTIC WASTE TANK, **500** ~~**300**~~ GALLONS.

   C. BATCH TREATMENT TANK CONSISTING OF A META BISULFITE COMPARTMENT, A BLEACH HOLDING COMPARTMENT, AN ACID HOLDING COMPARTMENT AND A CAUSTIC HOLDING COMPARTMENT ALL VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

   D. FILTER PRESS.

   E. FEED EVAPORATION TANK, 550 GALLONS.

   F. EVAPORATOR, RTI, MODEL NO. RG 20, **384,000** ~~**355,000**~~ BTU/HR NATURAL GAS FIRED, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

   G. EVAPORATOR, RTI, MODEL NO. RE250, 9 KW ELECTRICALLY HEATED, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

3. CHEMICAL FEED SUBSYSTEM CONSISTING OF:

A. TWO ACID FEED TANKS, 60 AND 305 GALLONS, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

B. TWO CAUSTIC FEED TANKS, 60 AND 305 GALLONS, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

A/N 556008 (Administrative change, current A/N 530894, P/O G17070): - P/O

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. SCRUBBER, L.W. LEFORT, HORIZONTAL TYPE, PACKED TOWER, MODEL NO. 244W, 4'-6" W. X 8'-2" L. X 7'-0" H., WITH A RECIRCULATION PUMP.

2. EXHAUST SYSTEM CONSISTING OF ONE 10 HP BLOWER VENTING THE FOLLOWING TANKS:
   A. PASSIVATION TANK NO. 12
   B. COPPER STRIPPING TANK NO. 13
   C. COATING TANK NO. 14
   D. NICKEL PLATING TANK NO. 17
   E. OPEN PROCESS TANK NO. 19
   F. ALKALINE CLEANING TANK NO. 21
   G. ETCHING/STRIPPING TANK NO. 22A
   ~~**H. PASSIVATION TANK NO. 41**~~
   I. BATCH TREATMENT TANK

A/N 556009 (Administrative change, current A/N 530897, P/O G17073): - P/O

ELECTROPLATING LINE CONSISTING OF:

1. COATING TANK, NO. 5, SODIUM DICHROMATE, 2'-6" W. X 2'-0" L. X 3'-0" D.

2. METAL STRIPPING TANK, NO. 6, SODIUM CYANIDE, 1'-3" W. X 2'-5" L. X 2'-1" D., HOT WATER HEATED.

3. SPRAY RINSE/COLLECTION TANK, NO. 9, SODIUM CYANIDE, 3'-0" W. X 3'-2" L. X 2'-8" D.

4. ELECTROPLATING TANK, NO. 10, CADMIUM, 3'-2" W. X 5'-10" L. X 2'-9" D., WITH A 3.5 KW RECTIFIER.

5. CADMIUM STRIPPING TANK, NO. 11, AMMONIUM NITRATE, 1'-5" W. X 2'-6" L. X 2'-4" D.

6. PASSIVATION TANK, NO. 12, NITRIC ACID, 2'-0" W. X 2'-6" L. X 3'-0" D., 10 KW ELECTRICALLY HEATED, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

7. COPPER STRIPPING TANK, NO. 13A, NITRIC ACID, 1'-4" W. X 2'-8" L. X 1'-8" D., VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

8. COATING TANK, NO. 14, SODIUM DICHROMATE, 2'-5" W. X 2'-0" L. X 3'-0" D., 10 KW ELECTRICALLY HEATED, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

9. NICKEL PLATING TANK, NO. 17, NICKEL SULFAMATE, 3'-0" W. X 3'-2" L. X 2'-9" D., WITH A 1.12 KW RECTIFIER, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

10. OPEN PROCESS TANK, NO. 19, HYDROCHLORIC ACID, 3'-0" W. X 3'-2" L. X 2'-9" D., VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

11. ALKALINE CLEANING TANK, NO. 21, SODIUM HYDROXIDE, 3'-2" W. X 6'-0" L. X 2'-2" D., WITH A 0.8 KW RECTIFIER, HOT WATER HEATED, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

12. ETCHING/STRIPPING TANK, NO. 22A, NITRIC ACID AND HYDROFLUORIC ACID, **1'-8" W. X 1'-8" L. X 2'-7" D.** ~~**1'-10" DIA. X 3'-0" H.**~~, WITH AN INSERTABLE STRIPPING TRAY, VENTED TO AIR POLLUTION CONTROL EQUIPMENT.

13. NITRIC ACID STRIP TANK, NO. 3A, NITRIC ACID, 1'-2" W. X 1'-11" L. X 0'-10" D.

14. ASSOCIATED RINSE TANKS.

A/N 556010 (Administrative change, current A/N 530893, P/O G17069): - P/O
AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. SCRUBBER, L.W. LEFORT, HORIZONTAL TYPE, PACKED TOWER, MODEL NO. 124, 4'-0" W. X 7'-0" L. X 4'-0" H., WITH A RECIRCULATION PUMP.

2. EXHAUST SYSTEM CONSISTING OF ONE 7 HP BLOWER VENTING ONE CLEANING TANK NO. 38, ONE ALKALINE CLEANING TANK NO. 40, TWO ACID FEED TANKS, TWO CAUSTIC FEED TANKS, TWO WASTEWATER EVAPORATORS AND **PASSIVATION TANK NO. 41.**

BACKGROUND

SPS Technologies submitted applications to make changes to four permitted equipment. The changes are as follows:

A/N	Previous A/N	Change Requested
556007	530899	Change acid waste tank (item 2A) and caustic waste tank (item 2B) capacities from 300 to 500 gallons. Change evaporator burner (item 2F) from 355,000 Btu/hr to 384,000 Btu/hr.
556008	530894	Remove passivation tank 41 (to A/N 556010).
556009	530897	Change tank 22A, dimensions change from 1'-10" DIA. X 3'-0" H. to 1'-8" W. X 1'-8" L. X 2'-7" D.
556010	530893	Add passivation tank 41 (from A/N 556008).

SPS Technologies is a Title V facility. The first Title V permit was issued to this facility on March 7, 2012 which was an administrative revision (C/O) and a TV renewal of the facility previously owned by PB Fasteners, ID# 3525. The change of ownership was finalized on October 4, 2011. SPS Technologies has proposed to revise their Title V permit with application no. 556006 by making changes to the permits for two scrubbers, a wastewater treatment system and an electroplating tank line. This permit revision is considered as a "de

minimis significant permit revision" to their Title V permit, as described in Regulation XXX evaluation.

The facility was last inspected on 8/13/2013. It was found to be operating in compliance with applicable rules. No public nuisance complaints have been filed against this facility within the last two years. Additionally, no NCs or NOVs were issued to the company within the last two years.

PROCESS DESCRIPTION

SPS Technologies manufactures metal fasteners for the aerospace industry. Production processes include forming, trimming, threading, degreasing and finishing these fasteners. During the finishing process, etching and stripping of unwanted or off-specification metal layers may be required. Depending on the nature of the job, titanium or nickel-cadmium may be etched or stripped from the surface of the parts. The metal parts are submerged in a series of cleaners to remove surface contaminants and oxides that may interfere with subsequent metal finishing operations. After exiting the surface preparation tanks the metal parts are rinsed with water to remove residual contaminants. The metal parts are then directed to open process tanks containing various metal finishing solutions to complete the finishing process. They also operate an airless, vapor degreaser which uses perchloroethylene for parts that require thorough cleaning. The company operates 16-24 hrs/day, 5-7 days/wk and 50-52 wks/yr.

EMISSION ESTIMATES

A/N 5556007 – Wastewater treatment system:
The burner change in the evaporator will cause a very small increase in combustion emissions. Emission estimates made previously will carry over to the new application. VOC is considered negligible since the system is closed loop; the wastewater is from some of the tanks in the tank lines (inorganic chemicals) and this equipment includes a 7 cubic feet activated carbon tower to remove VOC.

Wastewater Treatment System - Combustion Emissions from Evaporator
Post-Modification burner size = 384,000 Btu/hr
Pre-Modification burner size = 355,000 Btu/hr

Appl. No.	NOx		CO		PM/PM10		VOC	
	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day
556007 (Post –Mod)	0.048	1.14	0.013	0.31	0.003	0.066	0.003	0.061
530899 (Pre-Mod)	0.044	1.06	0.012	0.28	0.003	0.061	0.002	0.057
Increase	**+0.004**	**+0.08**	**+0.001**	**+0.03**	**0**	**+0.005**	**+0.001**	**+0.004**

A/N 556009 – Electroplating line:

The changes requested with this application have a negligible effect on emissions. In previous A/N 359277 when tank 22A was added, the emissions were calculated based on a surface area of 3.03 ft^2 for uncontrolled PM_{10} emissions of 0.015 lb/hr and controlled PM_{10} emissions of 0.0075 lb/hr. The surface area of the tank today is 2.78 ft^2 (1'-8" x 1'-8"). Since there is a reduction in surface area, there is an expected minute reduction in emissions from this modification. Emission estimates made previously will carry over to the new application.

PM_{10} R1 = 0.63 lb/hr
R2 = 0.064 lb/hr, 1.54 lb/day

NOx R1 = R2 = 0.014 lb/hr, 0.34 lb/day

RULE ANALYSIS

RULE 212 (c)(1): A public notice is not required for this project since the emission source is not located within 1,000 feet from the outer boundary of a school. The closest school (Crescendo Charter School) is located over 3,000 feet from the facility. A public notice is not required per the section of this rule.

Rule 212 (c)(2): This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212 (g). The proposed project will not result in an emission increase from the facility. A public notice is not required under this section of the rule.

Rule 212 (c)(3): This section requires a public notice for any new or modified permit unit with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in an MICR equal or greater than one in a million per permit unit or ten in a million per facility. The proposed project will not result in a cancer risk equal or greater than one in a million or ten in a million for the facility. A public notice is not required under this section of the rule.

Rule 212 (g): This section requires a public notice for all new or modified sources that result in emission increases exceeding any of the daily maximums specified by 212 (g). The proposed project will not result in an emission increase. A public notice is not required under this section of the rule.

RULES 401 & 402: AQMD database has no records of visible emissions or nuisance complaints against this facility. Compliance with these requirements is expected with the proper operation of the equipment.

REG XIII: There will not be an increase in emissions with the proposed project.

RULE 1401: There will not be an increase in toxic air contaminants with the proposed project.

REGULATION XXX

The proposed project is considered as a "de minimis significant revision" to the Title V permit issued to this facility. Rule 3000(b)(12) defines a "de minimis significant revision" as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NOx	40
PM10	30
SOx	60
CO	220

Rule 3003(j) specifies that a proposed permit for revision shall be submitted to EPA for review. To determine if a project qualifies for a "de minimis significant revision", emission increases resulting from all permit revisions that are made after the issuance of the renewal Title V permit shall be accumulated and compared to the above threshold levels. This proposed project is the first permit revision to the renewal Title V permit issued to this facility on March 7, 2012. The cumulative emission increases (all below 0.1 lb/day) resulting from this proposed permit revision are summarized as follows:

Revision	HAP	VOC	NOx	PM_{10}	SOx	CO
1st Permit Revision; modify a wastewater treatment system, a electroplating line and two scrubbers	0	0	0	0	0	0
Net Emission Total	0	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

RECOMMENDATION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant revision", it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to the EPA for a 45-day review pursuant to Rule 3003(j). If the EPA does not raise any objections within the review period, a revised Title V permit will be issued to this facility with P/Os issued to this equipment in revised Section D.